

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P980462

Luminaire Tested: PRLX-243-940-LL1-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980462
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-940-LL1-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

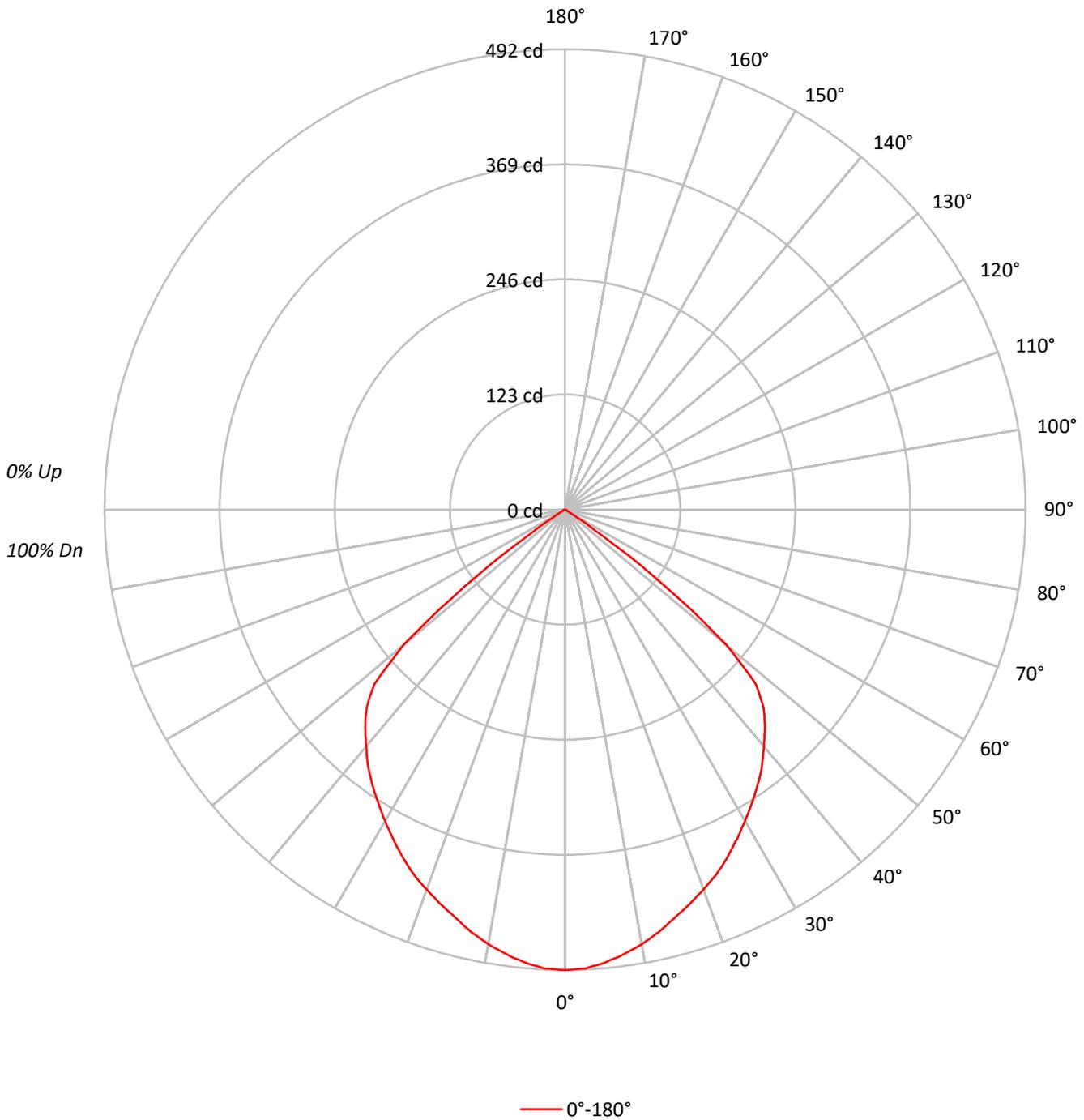
Lumens per Lamp: N/A
Luminaire Lumens: 883.0 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 7.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65
5	85	74	67	62	83	73	67	62	71	66	61	70	64	60	68	63	60	58
6	79	68	61	55	77	67	60	55	66	59	55	64	58	54	63	58	54	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	43
9	65	53	46	41	64	52	46	41	51	45	41	50	45	40	49	44	40	39
10	61	49	42	37	60	49	42	37	48	41	37	47	41	37	46	41	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2429
5°	2408
10°	2364
15°	2308
20°	2269
25°	2233
30°	2191
35°	2162
40°	2128
45°	2093
50°	1722
55°	407
60°	24
65°	23
70°	29
75°	31
80°	23
85°	23

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2093 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.9	5.2
10°-20°	127.6	14.5
20°-30°	188.9	21.4
30°-40°	224.5	25.4
40°-50°	225.5	25.5
50°-60°	66.4	7.5
60°-70°	2.0	0.2
70°-80°	1.5	0.2
80°-90°	0.5	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	362.4	41.0
0°-40°	587.0	66.5
0°-60°	878.9	99.5
0°-90°	883.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	883.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	492	
5°	486	46
15°	452	128
25°	410	189
35°	359	225
45°	300	225
55°	47	66
65°	2	2
75°	2	2
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	492.3
2.5°	491.1
5°	486.3
7.5°	479.5
10°	471.8
12.5°	462.6
15°	451.8
17.5°	442.2
20°	432.2
22.5°	422.2
25°	410.2
27.5°	397.3
30°	384.5
32.5°	371.7
35°	358.9
37.5°	345.7
40°	330.4
42.5°	316.0
45°	300.0
47.5°	276.4
50°	224.3
52.5°	135.4
55°	47.3
57.5°	9.2
60°	2.4
62.5°	2.0
65°	2.0
67.5°	2.0
70°	2.0
72.5°	1.6
75°	1.6
77.5°	1.2
80°	0.8
82.5°	0.8
85°	0.4
87.5°	0.4
90°	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00